REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Claim 3 has been amended to change its dependency, thus addressing the issue raised at the top of page two of the Official Action.

By way of this Amendment, new Claims 5-13 have been added. Thus, the claims currently pending in this application are Claims 1-13, with Claims 1 and 8 being the only independent claims.

The subject matter of this application pertains to a valve timing control device. As set forth in Claim 1, the valve timing control device comprises a rotor, a housing which is rotatable relative to the rotor, a projecting portion formed on the housing to slide on the outer circumference of the rotor, a fluid chamber defined between the rotor and the housing, a vane provided on the rotor and dividing the fluid chamber into a retard angle chamber and an advance angle chamber, and a torsion coil spring urging the rotor relative to the housing in the advance angle direction in which the volume of the retard angle chamber decreases and the volume of the advance angle chamber increases.

The Official Action observes that U.S. Patent No. 6,039,016 to *Noguchi* describes a valve timing control device having all of the features recited in original Claim 1. The valve timing control device disclosed in *Noguchi* includes an internal rotor 20, an external rotor 30, a plate 40 positioned at one end of the internal and external rotors, and a torsion spring 60. One end of the torsion spring 60 engages the plate 40 while the opposite end of the torsion spring 60 engages the internal rotor 20. Pressure chambers RO are located between spaced apart projecting portions 33

of the external rotor 33, and a vane 70 is positioned in each of the pressure chambers RO.

One of the differences between the valve timing control device recited in Claim 1 and the valve timing control device disclosed in *Noguchi* involves the positioning of the engaging portion that is engaged by the torsion spring relative to the projecting portion of the housing. As discussed in the present application in connection with a disclosed embodiment of valve timing control device, the torsion spring 60 is provided with a hook portion at one end that engages an engaging portion 91c. The engaging portion 91c is provided in a receiving groove 91 formed on the plate 40 that is connected to the housing 30. In addition, the housing 30 is provided with a projecting portion 33 that possesses circumferentially spaced apart opposite ends. As best shown in Fig. 3, the engaging portion 91c is circumferentially positioned between the opposite ends of the projecting portion 33c. The present application points out that this arrangement is advantageous from the standpoint of inhibiting the leakage of the operation fluid from the fluid chamber RO to the receiving groove 90.

Claim 1 has been amended to set forth the foregoing distinction by reciting that the projecting portion possesses circumferentially spaced apart ends and by reciting the first hook portion on one end of the coil portion of the torsion spring that engages a first engaging portion (opening toward the surface of the plate contacting the rotor) provided in a first receiving groove formed on a plate connected to the housing. In addition, Claim 1 has been amended to recite that the first engaging portion is circumferentially positioned between the ends of the projecting portion.

Noguchi does not disclose that the portion of the plate 40 which is engaged by the end of the spring 60 is circumferentially positioned between the circumferentially spaced apart ends of one of the projecting portions 33. Addressing the subject matter recited in original Claim 3, which also defines the positioning of the first engaging portion relative to the projecting portion, albeit with quite different wording than in amended Claim 1, the Official Action comments that Fig. 1, including reference numeral 30, discloses such subject matter. However, that is not the case. The feature identified by reference numeral "30" in *Noguchi* is the external rotor. In addition, Fig. 1 clearly does not disclose that the portion of the plate 40 engaged by the end of the spring 60 is circumferentially positioned between the circumferentially spaced apart ends of one of the projecting portions 33. Thus, Claim 1 is patentably distinguishable over the disclosure in *Noguchi*.

New independent Claim 8 is somewhat similar to Claim 1, but recites that one of the projecting portions has a greater circumferential extent than the other projecting portions, and further recites that the first engaging portion is circumferentially positioned between the ends of the one projecting portion having the greater circumferential extent than the other projecting portions. Claim 8 is distinguishable over the disclosure in *Noguchi* for at least the reasons discussed above in connection with Claim 1. Further, Noguchi does not disclose that the portion of the plate 40 engaged by the end of the spring 60 is circumferentially positioned between the circumferentially spaced apart ends of the projecting portion 33 having a greater circumferential extent than the other projecting portions.

The dependent claims are allowable at least by virtue of their dependence from allowable independent claims. The dependent claims also define further

distinguishing characteristics. For example, Claims 5, 7, 11 and 13 recite that the first and second hook portions of the coil spring extend in a radial direction of the coil portion of the coil spring. This is not the case with the spring 60 disclosed in *Noguchi* where the ends of the spring 60 extend in the axial direction.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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